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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,740	07/08/2003	Aaron B. Lian	DBH:8000.0023-002	1830
152	7590	08/25/2005		
CHERNOFF, VILHAUER, MCCLUNG & STENZEL 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204-3157			EXAMINER FERGUSON, MICHAEL P	
			ART UNIT 3679	PAPER NUMBER

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,740

Applicant(s)

LIAN ET AL.

Examiner

Michael P. Ferguson

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3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 17, 20, 28-31, 34, 37, 40, 43 and 45 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 15, 16, 18, 19, 21, 23, 25-27, 32, 33, 35, 36, 41, 42 and 44 is/are rejected.
- 7) ☒ Claim(s) 22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/08/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II, Species 1, Figures 1-4B, claims 15,16,18,19,21-27,32,33,35,36,38,39,41,42 and 44, in the reply filed on May 31, 2005 is acknowledged. The traversal is on the ground(s) that the product as claimed cannot be used in a materially different process. This is not found persuasive because the claimed lock can be used in a materially different process of using the product such as, as claimed, the retainer can be inserted into the lock body prior to inserting the lock body into the opening of the first and second member.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-14,17,20,28-31,34,37,40,43 and 45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on May 31, 2005.

Information Disclosure Statement

3. The information disclosure statement filed July 8, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Petersen (US 4,367,602).

As to claims 15 and 16, Petersen discloses a lock, comprising:

a rigid, substantially incompressible lock body **12**, the lock body being generally block-shaped, and the lock body defining an opening **32** and a pair of channels (defined on opposite sides of shank **21**; Figure 4) in communication with the opening and in communication with (located within) opposite sides of the lock body;

a retainer **46** having a hinge portion **47** and a pair of legs **49** terminating in respective ends, the hinge portion being receivable within the opening and each of the pair of legs being receivable within a respective one of the pair of channels, and the ends of the legs extending beyond the sides of the lock body; and

the lock body having a recess **26** in communication with the opening for prying the retainer out of the lock body; and

the lock body having a longitudinal take-up member **57** (Figures 1,4 and 4A).

6. Claims 18,19,21,23,25-27,32,33,35,36,41,42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Bierwith (US 6,032,390).

As to claims 18 and 19, Bierwith discloses a lock assembly, comprising:

a first member **20**, a second member **16**, and a lock **23,26,44**;

the first member and the second member being movable longitudinally with respect to one another into coupling engagement, and the first member and the second member having respective engaging surfaces to resist transverse movement of the first member and the second member with respect to one another when the first member and the second member are in coupling engagement;

the first member and the second member each having a lock-engaging wall, and the second member defining an opening between the lock-engaging wall of the first member and the lock-engaging wall of the second member, the lock being receivable through the opening when the first member and the second member are in the coupling engagement to resist relative longitudinal movement between the first member and the second member;

the lock comprising a lock body **44** and a retainer **46,48,50**, the lock body defining a channel having an outer end in communication with a side of the lock body;

the retainer being receivable at least partially within the channel, so that a portion of the retainer is selectively extensible to an interfering position beyond the side so as to interfere with removal of the lock body from the opening; and

the lock body defining an external opening separate from the outer end of the channel communicating with the channel internally of the lock body, the retainer being movable internally of the lock body in a direction toward the external opening so as to retract the portion of the retainer from the interfering position when the first member and the second member are in the coupling engagement; and

the portion of the retainer being retractable from the interfering position in response to a pulling force exerted on the portion of the retainer through the opening when the first member and the second member are in the coupling engagement (Figures 1,1A and 3).

As to claims 21 and 23, Bierwith discloses a lock assembly, comprising:

a first member **20**, a second member **16**, and a lock **23,26,44**;

the first member and the second member being movable longitudinally with respect to one another into coupling engagement, and the first member and the second member having respective engaging surfaces to resist transverse movement of the first member and the second member with respect to one another when the first member and the second member are in coupling engagement;

the first member and the second member each having a lock-engaging wall, and the second member defining an opening between the lock-engaging wall of the first member and the lock-engaging wall of the second member, the lock being receivable through the opening when the first member and the second member are in the coupling engagement to resist relative longitudinal movement between the first member and the second member; .

the lock comprising a lock body **44** and a retainer **46,48,50**, the lock body defining a channel in communication with a side of the lock body;

the retainer being receivable at least partially within the channel, so that a portion of the retainer is selectively extensible beyond the side so as to interfere with removal of the lock body from the opening; and both the retainer and the lock body being

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removable from the first member and the second member through the opening in the second member when the first member and the second member are in the coupling engagement; and

both the retainer and the lock body being removable from the first member and the second member in a substantially common direction when the first member and the second member are in the coupling engagement (Figures 1,1A and 3).

As to claim 25/18, Bierwith discloses a lock assembly wherein the lock body **44** is removable through the opening in the second member **16** along a path that does not require significant displacement of soil fines to remove the lock body from the opening in the second member (Figures 1,1A and 3).

As to claim 26/18, Bierwith discloses a lock assembly wherein the lock body **44** substantially fills the opening in the second member **16** (Figures 1,1A and 3).

As to claim 27/18, Bierwith discloses a lock assembly wherein the first member **20** is a base member and the second member **16** is a wear member (Figure 1).

As to claims 32 and 33, Bierwith discloses a lock **23,26,44**, comprising:

a rigid, substantially incompressible lock body **44** selectively receivable into a member to be locked, the lock body defining an external opening and a channel communicating internally with the external opening and having an outer end separate from the external opening communicating with a side of the lock body;

a retainer **46,48,50** at least partially formed from an elastomer (spring **50** is elastically deformable) and receivable through the external opening and at least partially within the channel so that a portion of the retainer is selectively extensible to an

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interfering position beyond the side of the lock body so as to interfere with removal of the lock body from the member; and

the retainer being movable internally of the lock body in a direction toward the external opening so as to retract the portion of the retainer from the interfering position when the lock body is within the member; and

the portion of the retainer being retractable from the interfering position in response to a pulling force exerted on the portion of the retainer through the external opening when the lock body is within the member (Figures 1, 1A and 3).

As to claims 35 and 36, Bierwith discloses a lock **23,26,44**, comprising:

a rigid, substantially incompressible lock body **44** selectively receivable into a member to be locked, the lock body defining an external opening and a channel communicating internally with the external opening and having an outer end separate from the external opening communicating with a side of the lock body;

an elastically deformable retainer **46,48,50** (spring **50** is elastically deformable) receivable through the external opening and at least partially within the channel so that a portion of the retainer is selectively extensible to an interfering position beyond the side of the lock body so as to interfere with removal of the lock body from the member, the retainer becoming more relaxed as is received into the lock body; and

the retainer being movable internally of the lock body in a direction toward the external opening so as to retract the portion of the retainer from the interfering position when the lock body is within the member; and

the portion of the retainer being retractable from the interfering position in response to a pulling force exerted on the portion of the retainer through the external opening when the lock body is within the member (Figures 1,1A and 3).

As to claims 41 and 42, Bierwith discloses a lock **23,26,44**, comprising:

a rigid, substantially incompressible lock body **44** selectively receivable into a member to be locked, the lock body defining an external opening and a channel communicating internally with the external opening and having an outer end separate from the external opening communicating with a side of the lock body;

a retainer **46,48,50** receivable through the external opening and at least partially within the channel so that a portion of the retainer is selectively extensible to an interfering position extending beyond the side of the lock body so as to interfere with removal of the lock body from the member; and

the retainer being movable internally of the lock body in a direction toward the external opening so as to retract the portion of the retainer from the interfering position when the lock body is within the member; and

the portion of the retainer being retractable from the interfering position in response to a pulling force exerted on the portion of the retainer through the external opening when the lock body is within the member (Figures 1,1A and 3).

As to claim 44/41, Bierwith discloses a lock **23,26,44** wherein the retainer **46,48,50** is removable through the external opening along a path that does not require significant displacement of soil fines to remove the retainer from the opening (Figures 1,1A and 3).

Allowable Subject Matter

7. Claims 38 and 39 are allowed.
8. Claims 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 22 and 24, Bierwith discloses the claimed lock assembly with the exception of wherein the retainer is removable through the opening without concurrent removal of the lock body therefrom.

As to claims 38 and 39, Bierwith discloses the claimed lock with the exception of comprising a lock body defining an external opening and a pair of channels communicating internally with the external opening and having outer ends separate from the external opening communicating with opposite sides of the lock body; and a retainer having a hinge portion at least partially receivable within the external opening and a pair of legs, each receivable within a respective one of the pair of channels and selectively extensible and retractable with respect thereto so that a portion of the retainer is selectively extensible to an interfering position beyond a respective one of the opposite sides of the lock body so as to interfere with removal of the lock body from the member.

There is no teaching or suggestion, absent the applicants' own disclosure, for one having ordinary skill in the art at the time the invention was made to modify the lock assembly as disclosed by Bierwith to have the above mentioned elemental features.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to lock assemblies:

Hahn et al. (US 4,663,867) and Hahn (US 4,727,663) are cited fore pertaining to assemblies comprising a first and second member and a lock comprising a lock body and a retainer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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